

S/N Unknown

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Klaus F. Schuegraf et al.	Examiner:	Unknown
Serial No.:	Unknown	Group Art Unit:	Unknown
Filed:	Herewith	Docket:	303.278US2
Title:	SELECTIVE SPACER TO PREVENT METAL OXIDE FORMATION DURING POLYCID REOXIDATION		

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Pursuant to 37 C.F.R. §1.98(d), copies of the listed documents are not provided as these references were previously cited by or submitted to the U.S. Patent Office in connection with Applicants' prior U.S. application, Serial No. 08/902809, filed on July 30, 1997, which is relied upon for an earlier filing date under 35 U.S.C. §120.

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POLYCID REOXIDATION

COMMUNICATION CONCERNING RELATED APPLICATION(S)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related application(s) in the above-identified patent application:

<u>Serial/Patent No.</u>	<u>Filing Date</u>	<u>Attorney Docket</u>	<u>Title</u>
08/902808 5925918	July 30, 1997	303.192US1	GATE STACK WITH IMPROVED SIDEWALL INTEGRITY
09/097353 5998290	June 15, 1998	303.192US2	METHOD TO PROTECT GATE STACK MATERIAL DURING SOURCE/DRAIN REOXIDATION
09/323178 6075274	May 28, 1999	303.192US3	SEMICONDUCTOR DEVICES HAVING GATE STACK WITH IMPROVED SIDEWALL INTEGRITY

Respectfully submitted,


KLAUS F. SCHUEGRAF ET AL.

By Applicants' Representatives,

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Date 27 February 2004

By


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Reg. No. 35,271

"Express Mail" mailing label number: EV370240125US

Date of Deposit: February 27, 2004

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INFORMATION DISCLOSURE STATEMENT

Serial No :Unknown

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The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

KLAUS F. SCHUEGRAF ET AL.


By their Representatives,

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known	
	Application Number	Unknown
	Filing Date	Even Date Herewith
	First Named Inventor	Schuegraf, Klaus
	Group Art Unit	Unknown
	Examiner Name	Unknown
Sheet 1 of 2	Attorney Docket No: 303.278US2	

US PATENT DOCUMENTS						
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	US-4,711,701	12/08/1987	McLevige, William V.	437	41	09/16/1986
	US-5,032,530	07/16/1991	Lowrey, Tyler A., et al.	437	34	10/27/1989
	US-5,087,584	02/11/1992	Wada, , et al.	437	43	04/30/1990
	US-5,103,272	04/07/1992	Nishiyama,	357	23.4	03/20/1990
	US-5,146,291	09/08/1992	Watabe, Kiyoto , et al.	357	23.4	08/31/1989
	US-5,175,606	12/29/1992	Tsai, Nun-Sian , et al.	257	320	04/22/1991
	US-5,235,204	08/10/1993	Tsai, Nun-Sian	257	408	08/08/1991
	US-5,268,330	12/07/1993	Givens, , et al.	437	195	12/11/1992
	US-5,272,367	12/21/1993	Dennison, Charles H., et al.	257	306	12/07/1992
	US-5,364,804	11/15/1994	Ho, Yen-Shyh , et al.	437	41	11/03/1993
	US-5,371,026	12/06/1994	Hayden, James D., et al.	437	41	11/30/1992
	US-5,382,551	01/17/1995	Thakur, , et al.	437	247	04/09/1993
	US-5,397,722	03/14/1995	Bashir, Rashid , et al.	437	41	07/11/1994
	US-5,422,291	06/06/1995	Clementi, , et al.	437	43	05/26/1993
	US-5,425,392	06/20/1995	Thakur, , et al.	437	173	05/26/1993
	US-5,438,016	08/01/1995	Figura, , et al.	437	67	03/02/1994
	US-5,439,838	08/08/1995	Yang, M T.	437	43	09/14/1994
	US-5,459,345	10/17/1995	Okudaira, Tomonori , et al.	257	310	06/22/1994
	US-5,468,665	11/21/1995	Lee, Chang-Jae , et al.	437	44	01/23/1995
	US-5,480,830	01/02/1996	Liao, S. , et al.	437	58	04/04/1995
	US-5,526,306	06/11/1996	Hikawa, Tetsuo , et al.	365	182	06/07/1994
	US-5,538,906	07/23/1996	Aoki, Hitoshi	437	29	01/30/1995
	US-5,545,578	08/13/1996	Park, Y. , et al.	437	44	05/15/1995
	US-5,583,368	12/10/1996	Kenney, Donald M.	257	621	08/11/1994
	US-5,597,756	01/28/1997	Fazan, P. C., et al.	437	52	06/21/1995
	US-5,608,249	03/04/1997	Gonzalez, Fernando	257	306	11/16/1995
	US-5,624,865	04/29/1997	Schuegraf, Klaus F., et al.	438	396	10/13/1995
	US-5,668,394	09/16/1997	Lur, Water , et al.	257	413	01/03/1996
	US-5,681,768	10/28/1997	Smayling, M C., et al.	437	41	06/07/1995
	US-5,707,898	01/13/1998	Keller, J. D., et al.	438	265	04/01/1996
	US-5,739,066	04/14/1998	Pan, P.	438	595	09/17/1996
	US-5,796,151	08/18/1998	Hsu, W. , et al.	257	410	12/19/1996

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	Unknown
Filing Date	Even Date Herewith
First Named Inventor	Schuegraf, Klaus
Group Art Unit	Unknown
Examiner Name	Unknown

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	US-5,804,838	09/08/1998	Manning, Monte	257	72	07/03/1997
	US-5,925,918	07/20/1999	Wu, Zhiqiang , et al.	257	413	07/30/1997
	US-5,929,494	07/27/1999	Li, Che C.	257	390	10/20/1997
	US-5,998,290	12/07/1999	Wu, Zhiqiang , et al.	438	595	06/15/1998
	US-6,075,274	06/13/2000	Wu, Z. , et al.	257	413	05/28/1999

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
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OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BEYERS, R. , "Thermodynamic Considerations in Refractory Metal Silicon-Oxygen Systems", J. Appl. Phys., 56, (July 1984),147-152	
		GLASSER, LANCE A., et al., "The Design and Analysis of VLSI Circuits", (1985),pp. 100-103, 176-179, 182-183	
		KASAI, K. , et al., "W/WNx/Poly-Si Gate Technology for Future High Speed Deep Submicron CMOS LSIs", IEDM 1994, (1994),497-500	
		LEE, D. H., et al., "Gate Oxide Integrity (GOI) of MOS transistors with W/TiN stacked gate", 1996 Symposium on VLSI Technology Digest of Technical Papers, (1996),208-209	
		WESTE, NEIL H., "Principles of CMOS VLSI Design - a systems perspective", Addison-Wesley publishing company, 2nd ed., AT&T,(1993),pp. 71-72	

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